





# MARINE CORPS AVIATION AROUND THE GLOBE

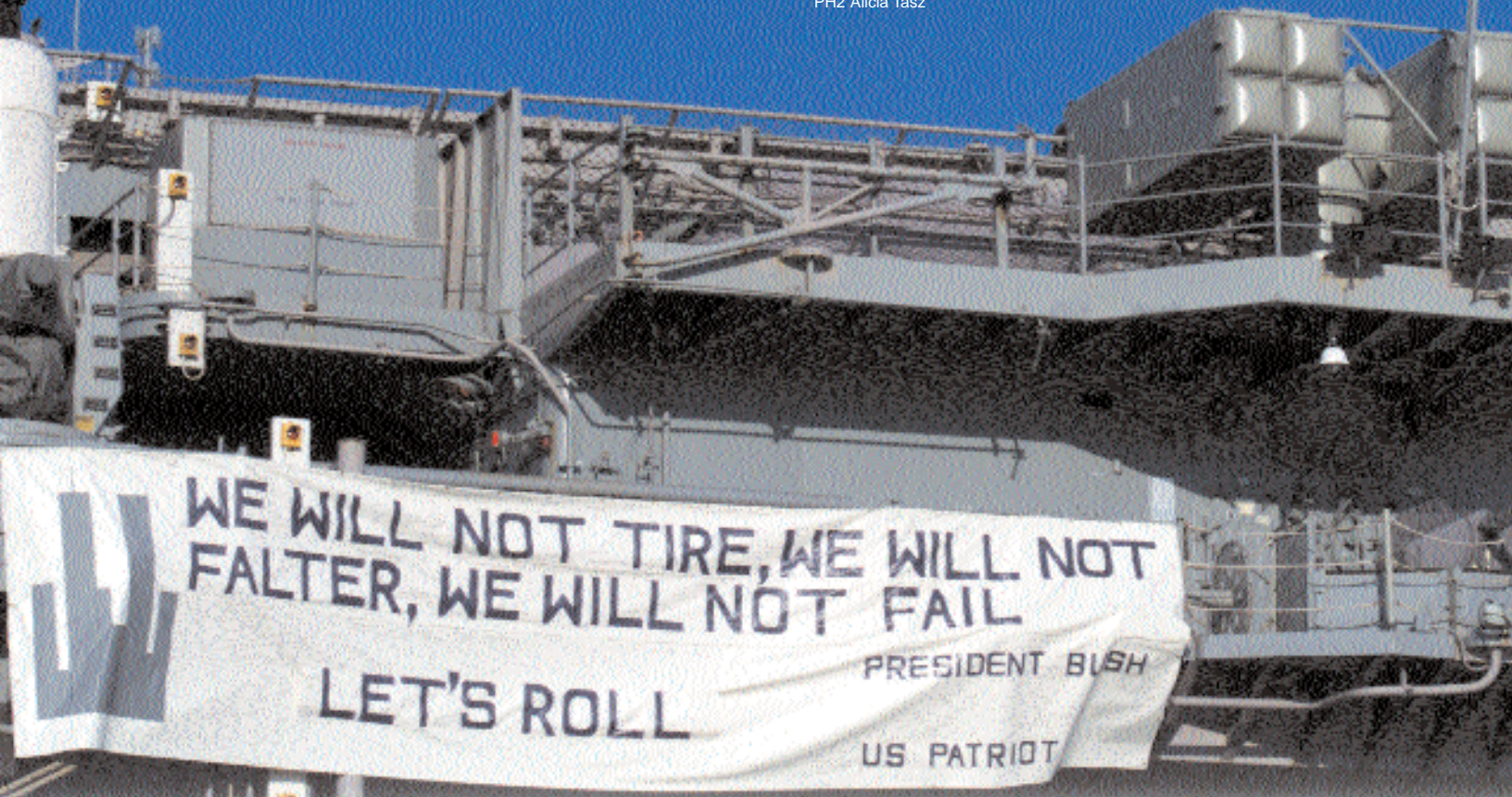
*The following overview highlights many of the critical components of Marine Aviation today. It is not intended to be a comprehensive representation.*

**M**arine Corps Aviation was officially born on 22 May 1912, when Lieutenant Alfred A. Cunningham, USMC, reported to the aviation camp at Annapolis, Md., for “duty in connection with aviation.” Today, two factors continue to make Marine Aviation unique: its close relationship with Naval Aviation and its unchanging objective to provide direct support to Marine ground forces in combat.

The tasks of Marine Aviation fall into six functional areas: offensive air support, antiair warfare, assault support, air reconnaissance, electronic warfare, and control of aircraft and missiles. It is also employed in nontraditional roles, such as providing direct support to the President of the United States, aviation detachments for independent duty and forces for counterdrug operations; as well as participating in disaster relief operations.



PH2 Alicia Tasz







The flexible support provided from both naval sea basing and austere sites ashore and the ability to operate successfully in a joint or combined environment highlight the value of Marine Aviation's expeditionary capabilities. Marine Corps Aviation seeks to provide a responsive, fully integrated, balanced and ready Aviation Combat Element (ACE). Further reorganization and refinement will be implemented as required by future force structure decisions. Weapon system improvements will continue to maximize combat power to the Marine Air-Ground Task Force (MAGTF), while offsetting the potential for tactical obsolescence. Readiness and training will continue to be emphasized to ensure unity of effort through a consistently capable, high-quality and responsive aviation force.

Facing page, the amphibious assault ship *Iwo Jima* (LHD 7) displays an inspiring banner in March 2003. Facing page inset, a Marine aircrewman loads ammunition into the magazine of his M-16 while aboard *Kearsage* (LHD 3) in February 2003. Above, HMH-462 CH-53Es pass over assault amphibian vehicles during Operation Cobra Gold 2002 in Thailand. Right, Aviation Boatswain's Mate Third Class Jennifer Rohrbaugh signals an AH-1W Super Cobra of MAG-29 embarked aboard *Saipan* (LHA 2) in January 2003.







## MARINE HEAVY HELICOPTER SQUADRON (HMH)

**F**lying the CH-53D Sea Stallion and CH-53E Super Stallion, provides assault helicopter transport of heavy weapons, equipment and supplies during amphibious and subsequent ashore operations.

Left, a CH-53E Super Stallion assigned to the *Heavy Haulers* of HMH-462 takes off to demonstrate an amphibious assault during Operation Cobra Gold 2002. Below, a CH-53E from the 31st Marine Expeditionary Unit ACE performs deck landing qualifications aboard *Essex* (LHD 2).



PHAN Marvin Thompson



Lt. Col. Doug Wadsworth

CH-53D Sea Stallions from the *Ugly Angels* of HMH-362 conduct troop lift operations for Landing Force Cooperation Afloat Readiness and Training in Brunei, above, and execute heavy-lift operations in support of Operation Crow Valley in the Philippines, right.



SSgt. Tad Ordoyne





## MARINE ATTACK SQUADRON (VMA)

**F**lying the AV-8B Harrier II, attacks and destroys surface targets under all-weather conditions, day and night.

Above, an AV-8B Harrier II Plus from the 24th Marine Expeditionary Unit (Special Operations Capable) lands on the flight deck of *Nassau* (LHA 4) after conducting flight operations in the U.S. Central Command area of responsibility. Right, a Harrier II from VMA-311 dumps fuel while chasing the sun into MCAS Miramar, Calif. Below right, a pair of AV-8Bs from VMA-211 hold over *Bonhomme Richard* (LHD 6)



Capt. John Havener



Capt. Matt Haefner

waiting to recover. Above inset, a VMA-311 Harrier II tanks with a British L-1011 over Afghanistan during a mission in support of Operation Enduring Freedom last year.



Capt. Matt Haefner



## MARINE MEDIUM HELICOPTER SQUADRON (HMM)

Flying the CH-46E Sea Knight, supplies assault transport of combat troops in the initial assault waves and follow-on stages of amphibious and subsequent ashore operations.



Top, a CH-46 Sea Knight prepares to take off from *Kearsarge* (LHD 3), serving as the flagship for the seven-ship Amphibious Task Force East conducting missions in support of Operation Enduring Freedom in February 2003. Above, Marines from the 24th Marine Expeditionary Unit fast-rope from a CH-46 Sea Knight during their Training in an Urban Environment Exercise. Left, a Marine aircrewman prepares for flight in a CH-46E Sea Knight out of Kandahar, Afghanistan, during Operation Enduring Freedom.





## MARINE TACTICAL ELECTRONIC WARFARE SQUADRON (VMAQ)

**F**lying the EA-6B Prowler, conducts airborne electronic warfare including electronic attack/protection/support to control the electromagnetic spectrum or to attack the enemy in support of Fleet Marine Force and joint operations.

Right, Capt. Dean Driskill of VMAQ-2 scans his equipment during a training event. Below, VMAQ-2 crew members exit their EA-6B Prowler at U.S. Naval Support Activity Souda Bay, Crete, Greece, in February 2003. The squadron is based at MCAS Cherry Point, NC.



Mike Wilson

Paul Farley





## MARINE LIGHT ATTACK HELICOPTER SQUADRON (HMLA)

**F**lying the UH-1N “Huey” and AH-1W Super Cobra, provides combat utility helicopter support, attack helicopter fire support and fire support coordination during amphibious and subsequent ashore operations.



Above, two AH-1W Super Cobra helicopters from HMLA-167 fly over Spain during a simulated close-air-support mission while participating in Exercise Dynamic Mix 2002.

On board amphibious ships such as *Tarawa* (LHA 1), “skids” are an integral part of the ACE. Left, an AH-1W Super Cobra takes off in the Arabian Gulf. Below, ordnancemen prepare a UH-1N Huey for flight.



Wendy Leland



Wendy Leland





## MARINE FIGHTER ATTACK SQUADRON (VMFA)

**F**lying the F/A-18A/C Hornet, intercepts and destroys enemy aircraft under all-weather conditions, and attacks and destroys surface targets.



PH3 Christopher B. Stoltz

Top, a pair of VMFA-251 F/A-18s drop their hooks for the camera. Above, an F/A-18 Hornet from VMFA-115 traps aboard *Harry S. Truman* (CVN 75). Above right, F/A-18 weapon systems operator Capt. Joe E. Maybach of VMFA(AW)-121 hugs his girlfriend before deploying for Operation Enduring Freedom. Below, Capt. Chuck Gant photographed himself and another VMFA(AW)-533 F/A-18D Hornet in formation.



## MARINE ALL-WEATHER FIGHTER ATTACK SQUADRON (VMFA(AW))

**F**lying the F/A-18D Hornet, attacks and destroys surface targets under adverse weather conditions during both day and night missions, conducts multisensor imagery reconnaissance, provides supporting arms coordination, and intercepts and destroys enemy aircraft during all types of weather.







Ted Carlson



Ted Carlson



CWO William D. Crow

## MARINE AERIAL REFUELER TRANSPORT SQUADRON (VMGR)

**F**lying the KC-130 Hercules, provides tactical aerial refueling service to Marine aviation units, maintaining an all-weather capability and operating from a variety of bases. Other tasks include assault air transport, casualty evacuation and ground refueling of air and ground assets.

Top, the excellent visibility from the KC-130 cockpit is evident in this flight station photo showing two VMGR-252 pilots flying their Hercules over California last year. Inset to top, a KC-130F of VMGR-152 refuels two thirsty F/A-18C Hornets. Above, a KC-130 Hercules from VMGR-352 prepares for its next mission at an undisclosed forward operating base, while another Herc assigned to VMGR-252 takes off on a mission to transport Marines, right, from the 26th Marine Expeditionary Unit back to Kandahar Airport in Afghanistan.



CWO William D. Crow





## MARINE FIGHTER ATTACK TRAINING SQUADRON (VMFAT)

**F**lying the F/A-18A/C/D Hornet and the T-34C Turbo-Mentor, provides the Fleet Marine Force and fleet squadrons with qualified F/A-18 Hornet pilots and weapon systems operators (WSO) for F/A-18Ds.

Above, VMFAT-101 F/A-18Ds are used to train pilots and WSOs for duty with VMFA(AW) squadrons. Right, the T-34C is used for spotting during training missions.



Chuck Lloyd

## MARINE HELICOPTER SQUADRON (HMX)

**F**lying the VH-3D Sea King, VH-60N Blackhawk, CH-46 and CH-53E, provides the President of the United States with helicopter transportation, and tests and evaluates helicopter systems for the Fleet Marine Force.

Left, a VH-60N from HMX-1 sports an immaculate green and white paint job.

## MARINE FIGHTER TRAINING SQUADRON (VMFT)

**F**lying the F-5E and F-5F Tiger II, provides adversary tactics training for Fleet Marine Force and fleet squadrons.

Right, a VMFT-401 F-5E flies wing on a squadron two-seat F-5F.



Rick Linares



# Marine Corps Aeronautical Organization—U.S. Marine Corps Aviation

## Marine Air Wings

First MAW	MCAS Futenma, Okinawa, Japan
Second MAW	MCAS Cherry Point, NC
Third MAW	MCAS Miramar, CA
Fourth MAW	NAS JRB New Orleans, LA

## Headquarters/Headquarters Squadrons

HHS-17	Camp Foster, Okinawa, Japan
HHS-18	MCAS Futenma, Okinawa, Japan
HHS-27	MCAS Cherry Point, NC
HHS-28	MCAS Cherry Point, NC
HHS-37	MCAS Miramar, CA
HHS-38	MCAS Miramar, CA
HHS-Beaufort	MCAS Beaufort, SC
HHS-Futenma	MCAS Futenma, Okinawa, Japan
HHS-Iwakuni	MCAS Iwakuni, Japan
HHS-Kaneohe	MCAF Kaneohe Bay, HI
HHS-Miramar	MCAS Miramar, CA
HHS-New River	MCAS New River, NC
HHS-Yuma	MCAS Yuma, AZ

## Marine Wing Headquarters Squadrons

MWHS-1	MCAS Futenma, Okinawa, Japan
MWHS-2	MCAS Cherry Point, NC
MWHS-3	MCAS Miramar, CA

## Marine Wing Support Groups

MWSG-17	Camp Foster, Okinawa, Japan
MWSG-27	MCAS Cherry Point, NC
MWSG-37	MCAS Miramar, CA
MWSG-47	Selfridge ANGB, MI

## Marine Wing Communications Squadrons

MWCS-18	MCAS Futenma, Okinawa, Japan
MWCS-28	MCAS Cherry Point, NC
MWCS-38	MCAS Miramar, CA
MWCS-48	NTC Great Lakes, IL

## Marine Wing Support Squadrons

MWSS-171	MCAS Iwakuni, Japan
MWSS-172	MCAS Futenma, Okinawa, Japan
MWSS-271	Bogue Airfield, NC
MWSS-272	MCAS New River, NC
MWSS-273	MCAS Beaufort, SC
MWSS-274	MCAS Cherry Point, NC
MWSS-371	MCAS Yuma, AZ
MWSS-372	MCAS Camp Pendleton, CA
MWSS-373	MCAS Miramar, CA
MWSS-374	MCAGCC Twentynine Palms, CA
MWSS-471	NAS JRB Fort Worth, TX
MWSS-472	NAS JRB Atlanta, GA
MWSS-473	MCAS Miramar, CA
MWSS-474	NAS JRB Willow Grove, PA

## Marine Aircraft Groups

MAG-11	MCAS Miramar, CA
MAG-12	MCAS Iwakuni, Japan
MAG-13	MCAS Yuma, AZ
MAG-14	MCAS Cherry Point, NC
MAG-16	MCAS Miramar, CA
MAG-24	MCAF Kaneohe Bay, HI
MAG-26	MCAS New River, NC
MAG-29	MCAS New River, NC
MAG-31	MCAS Beaufort, SC
MAG-36	MCAS Futenma, Okinawa, Japan
MAG-39	MCAS Camp Pendleton, CA
MAG-41	NAS JRB Fort Worth, TX
MAG-42	NAS JRB Atlanta, GA
MAG-46	MCAS Miramar, CA
MAG-49	NAS JRB Willow Grove, PA

## Marine Air Control Groups

MACG-18	MCAS Futenma, Okinawa, Japan
MACG-28	MCAS Cherry Point, NC
MACG-38	MCAS Miramar, CA
MACG-48	NTC Great Lakes, IL

## Attack Squadrons

VMA-211	MCAS Yuma, AZ
VMA-214	MCAS Yuma, AZ
VMA-223	MCAS Cherry Point, NC
VMA-231	MCAS Cherry Point, NC
VMA-311	MCAS Yuma, AZ
VMA-513	MCAS Yuma, AZ
VMA-542	MCAS Cherry Point, NC

## Fighter Attack Squadrons

VMFA-112	NAS JRB Fort Worth, TX
VMFA-115	MCAS Beaufort, SC
VMFA-122	MCAS Beaufort, SC
VMFA-134	MCAS Miramar, CA
VMFA-142	NAS JRB Atlanta, GA
VMFA-212	MCAS Iwakuni, Japan
VMFA-232	MCAS Miramar, CA
VMFA-251	MCAS Beaufort, SC
VMFA-312	MCAS Beaufort, SC
VMFA-314	MCAS Miramar, CA
VMFA-321	NAF Washington, DC
VMFA-323	MCAS Miramar, CA

## All Weather Fighter Attack Squadrons

VMFA(AW)-121	MCAS Miramar, CA
VMFA(AW)-224	MCAS Beaufort, SC
VMFA(AW)-225	MCAS Miramar, CA
VMFA(AW)-242	MCAS Miramar, CA
VMFA(AW)-332	MCAS Beaufort, SC
VMFA(AW)-533	MCAS Beaufort, SC



# CARRIER PILOT LEARNS SECRETS OF WRIGHT BROTHERS

By *Kitty Hawk* (CV 63) Public Affairs



LCdr. Rick Haupt

**L**ieutenant Commander Klas Ohman, a *Kitty Hawk* (CV 63) F/A-18C Hornet and Navy test pilot, right, recently completed an aviation archaeology expedition at Jockey's Ridge State Park, N.C., retracing discoveries made by the pioneers of aviation 100 years ago. In doing so, Ohman completed numerous flights in a replica of a 1902 Wright brothers glider, the first aircraft to incorporate yaw, pitch and roll controls, a technology that paved the way for powered flight and aviation as we know it today.



Learning the thinking processes of the aviation pioneers was enlightening for all involved, but the goal of the expedition was to further the future of aviation industry by inspiring young people.

Ohman logged a total of 25 flights in the glider, after training in a hang glider for two days. In order to fly, the historic glider replica requires a nominal 15 knots of wind and four people to literally run it up to about five knots over the ground. The longest flight measured was over 250 feet and was sustained for approximately 40 seconds.

Ohman looks forward to retracing more of the Wrights' historic discoveries in the upcoming months as the nation nears the 100th anniversary of the 17 December 1903 flight of the Wright Flyer, the first powered flight.

For related news [www.news.navy.mil/local/cv63](http://www.news.navy.mil/local/cv63) or [www.kittyhawk.navy.mil](http://www.kittyhawk.navy.mil).

## BURGERS ON THE BARBEY

Members of the Australian air force hosted a barbeque at NAS North Island, Calif, that raised \$200 for Navy-Marine Corps Relief. The main dish was "Aussie Burgers," a cheeseburger with a pineapple ring, a slice of beet and a fried egg. When presenting the check, the squadron leader said, "It seems *Fosters*, *Russell Crowe* and *Crocodile Dundee* are not the only things Australia has brought to America."







PH3 Staci M. Bitzer

**Capt. Stan V. DeGeus, commanding officer of *Bonhomme Richard* (LHD 6), watches an AV-8B Harrier II hover within feet of the bridge window.**

### Air Control Squadrons

MACS-1	MCAS Camp Pendleton, CA
MACS-2	MCAS Beaufort, SC
MACS-4	MCAS Futenma, Okinawa, Japan
MACS-6	MCAS Cherry Point, NC
MACS-7	MCAS Yuma, AZ
MACS-23	Buckley ANGB, CO
MACS-24	FCTC Dam Neck, VA

### Air Support Squadrons

MASS-1	MCAS Cherry Point, NC
MASS-2	MCAS Futenma, Okinawa, Japan
MASS-3	MCAS Camp Pendleton, CA
MASS-6	NTC Great Lakes, IL

### Tactical Air Control Squadrons

MTACS-18	MCAS Futenma, Okinawa, Japan
MTACS-28	MCAS Cherry Point, NC
MTACS-38	MCAS Miramar, CA
MTACS-48	NTC Great Lakes, IL

### Low Altitude Air Defense Battalions

First Stinger Battery	MCAS Futenma, Okinawa, Japan
Second LAAD	MCAS Cherry Point, NC
Third LAAD	MCAS Camp Pendleton, CA
Fourth LAAD	Pasadena, CA

### Shore Commands

Air Bases Eastern Area	MCAS Cherry Point, NC
Air Bases Western Area	MCAS Miramar, CA
Bogue Airfield, NC	
Buckley ANGB, CO	
Camp Foster, Okinawa, Japan	
Edwards AFB, CA	

FCTC Dam Neck, VA

Marine Aviation Detachment NAWC China Lake, CA

Marine Aviation Detachment NAWC Patuxent River, MD

Marine Aviation Training

Support Group

NAS Corpus Christi, TX

Marine Aviation Training

Support Group

NAS Lemoore, CA

Marine Aviation Training

Support Group

NAS Meridian, MS

Marine Aviation Training

Support Group

NAS Pensacola, FL

Marine Aviation Training

Support Group

NAS Whidbey Island, WA

MCAGCC Twentynine Palms, CA

MCAF Kaneohe Bay, HI

MCAF Quantico, VA

MCAS Beaufort, SC

MCAS Camp Pendleton, CA

MCAS Cherry Point, NC

MCAS Futenma, Okinawa, Japan

MCAS Iwakuni, Japan

MCAS Miramar, CA

MCAS New River, NC

MCAS Yuma, AZ

NAF Washington, DC

NAS JRB Atlanta, GA

NAS JRB Fort Worth, TX

NAS JRB Willow Grove, PA

NTC Great Lakes, IL

Pasadena, CA

Selfridge ANGB, MI

Stewart ANGB, NY

Note: Organization chart includes only Marine Aviation units active as of press time. Information compiled by the Naval Aviation History Branch, Naval Historical Center.